

Author Index

Andersson, L.A.H., see Odenbrand, C.U.I. 109

Andreev, A., Kafedjiiski, V., Halachev, T., Kunev, B. and Kaltchev, M.
Raney type copper-zinc-aluminium catalyst for water-gas shift reaction 199

Armor, J.N.
New catalytic technology commercialized in the USA during the 1980's – a Review 141

Armor, J.N., see Parris, G.E. 45

Armor, J.N., see Parris, G.E. 65

Baerns, M., see Schulz, P. 15

Blom, P., see Zeuthen, P. 265

Brandin, J.G.M., see Odenbrand, C.U.I. 109

Burggraaf, A.J., see Mercera, P.D.L. 79

Cai, Y. and Ozkan, U.S.
Vanadia/titania catalysts in selective catalytic reduction of nitric oxide with ammonia 241

Chen, Y.Z. and Wu, K.J.
Hydrogenation activity and selectivity of cobalt borides 185

Doesburg, E.B.M., see Mercera, P.D.L. 79

Du, H.-Z., Wu, R.-G., Fang, L.-Q., Wang, H.-Z. and Lin, L.-W.
Surface features and catalytic performances of platinum/alumina and platinum-rhenium/alumina catalysts for n-heptane conversion prepared by metal carbonyl complexes 1

Fang, L.-Q., see Du, H.-Z. 1

Fenelonov, V.B., see Shepeleva, M.N. 175

Frety, R., see Tournayan, L. 31

Frety, R., see Schmal, M. 125

Frusteri, F., see Parmaliana, A. L7

Gabrielsson, P.L.T., see Odenbrand, C.U.I. 109

Giordano, N., see Parmaliana, A. L7

Gormley, R.J., see Soong, Y. 97

Halachev, T., see Andreev, A. 199

Ismagilov, Z.R., see Shepeleva, M.N. 175

Kafedjiiski, V., see Andreev, A. 199

Kaltchev, M., see Andreev, A. 199

Krjukova, G.N., see Morozova, O.S. 227

Krylov, O.V., see Morozova, O.S. 227

Kunev, B., see Andreev, A. 199

Lauron-Pernot, H., Luck, F. and Popa, J.M.
Methylbutynol: a new and simple diagnostic tool for acidic and basic sites of solids 213

Lin, L.-W., see Du, H.-Z. 1

Luck, F., see Lauron-Pernot, H. 213

Maksimov, Yu.V., see Morozova, O.S. 227

Marcilio, N.R., see Tournayan, L. 31

Massoth, F.E., see Zeuthen, P. 265

Matveyev, V.V., see Morozova, O.S. 227

Mercera, P.D.L., Van Ommen, J.G., Doesburg, E.B.M., Burggraaf, A.J. and Ross, J.R.H.
Stabilized tetragonal zirconium oxide as a support for catalysts. Evolution of the texture and structure on calcination in static air 79

Mezzapica, A., see Parmaliana, A. L7

Miceli, D., see Parmaliana, A. L7

Morozova, O.S., Maksimov, Yu.V., Shashkin, D.P., Shirjaev, P.A., Matveyev, V.V., Zhorin, V.A., Krylov, O.V. and Krjukova, G.N.
Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies 227

Mrocze, U., see Reschetilowski, W. 257

Noronha, F.B., see Schmal, M. 125

Odenbrand, C.U.I., Gabrielsson, P.L.T., Brandin, J.G.M. and Andersson, L.A.H.
Effect of water vapor on the selectivity in the reduction of nitric oxide with ammonia over vanadia supported on silica-titania 109

Ozkan, U.S., see Cai, Y. 241

Parmaliana, A., Frusteri, F., Miceli, D., Mezzapica, A., Giordano, N. and Scurrell, M.S.
Factors controlling the reactivity of the silica surface in methane partial oxidation L7

Parris, G.E. and Armor, J.N.
Catalytic cracking of organic amides. I. Production of N-vinylformamide 45

Parris, G.E. and Armor, J.N.
Catalytic cracking of organic amides. II. Use of substituted amides, mechanism, and a predictive index for reactivity 65

Popa, J.M., see Lauron-Pernot, H. 213

Primet, M., see Schmal, M. 125

Rao, V.U.S., see Soong, Y. 97

Reshetilowski, W., Mrocze, U., Steinberg, K.-H. and Wendlandt, K.-P.
Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites 257

Ross, J.R.H., see Mercera, P.D.L. 79

Schmal, M., Primet, M., Noronha, F.B. and Frety, R.
Characterization of palladium-copper bimetallic catalysts supported on silica and niobia

125

Schulz, P. and Baerns, M.
Aromatization of ethane over gallium-promoted H-ZSM-5 catalysts 15

Scurrell, M.S., see Parmaliana, A. L7

Shashkin, D.P., see Morozova, O.S. 227

Shepeleva, M.N., Shkrabina, R.A., Fenelonov, V.B. and Ismagilov, Z.R.
Production of spherical granules of alumina with controlled porous structure 175

Shirjaev, P.A., see Morozova, O.S. 227

Shkrabina, R.A., see Shepeleva, M.N. 175

Soong, Y., Rao, V.U.S., Gormley, R.J. and Zhong, B.
Temperature-programmed desorption study on manganese-iron catalysts 97

Steinberg, K.-H., see Reschetilowski, W. 257

Tomita, A., see Yamashita, H. L1

Tournayan, L., Marcilio, N.R. and Frety, R.
Promotion of hydrogen uptake in cerium dioxide. The role of iridium 31

Van Ommen, J.G., see Mercera, P.D.L. 79

Wang, H.-Z., see Du, H.-Z. 1

Wendlandt, K.-P., see Reschetilowski, W. 257

Wu, K.J., see Chen, Y.Z. 185

Wu, R.-G., see Du, H.-Z. 1

Yamada, H., see Yamashita, H. L1

Yamashita, H., Yamada, H. and Tomita, A.
Reaction of nitric oxide with metal-loaded carbon in the presence of oxygen L1

Zeuthen, P., Blom, P. and Massoth, F.E.
Characterization of nitrogen on aged hydroprocessing catalysts by temperature-programmed oxidation 265

Zhong, B., see Soong, Y. 97

Zhorin, V.A., see Morozova, O.S. 227

Subject Index

Acid-base properties
 Methylbutynol: a new and simple diagnostic tool for acidic and basic sites of solids 213

Adsorption
 Characterization of nitrogen on aged hydro-processing catalysts by temperature-programmed oxidation 265

Ageing
 Characterization of nitrogen on aged hydro-processing catalysts by temperature-programmed oxidation 265

Alkoxy-formamides
 Catalytic cracking of organic amides. II. Use of substituted amides, mechanism, and a predictive index for reactivity 65

Alumina
 Methylbutynol: a new and simple diagnostic tool for acidic and basic sites of solids 213

Aluminium hydroxide
 Production of spherical granules of alumina with controlled porous structure 175

Amides
 Catalytic cracking of organic amides. I. Production of N-vinylformamide 45

Amides
 Catalytic cracking of organic amides. II. Use of substituted amides, mechanism, and a predictive index for reactivity 65

Anatase
 Vanadia/titania catalysts in selective catalytic reduction of nitric oxide with ammonia 241

Aromatization
 Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites 257

Bimetallic catalysts
 Characterization of palladium-copper bimetallic catalysts supported on silica and niobia 125

2-methyl-3-Butyn-2-ol reactivity
 Methylbutynol: a new and simple diagnostic tool for acidic and basic sites of solids 213

Carbon
 Catalytic cracking of organic amides. I. Production of N-vinylformamide 45

Carbon monoxide hydrogenation
 Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies 227

Carbon oxides
 Reaction of nitric oxide with metal-loaded carbon in the presence of oxygen L1

Catalyst characterization (DTA, TG, TEM, XRD, nitrogen physisorption)
 Stabilized tetragonal zirconium oxide as a support for catalysts. Evolution of the texture and structure on calcination in static air 79

Catalyst characterization (test reaction)
 Methylbutynol: a new and simple diagnostic tool for acidic and basic sites of solids 213

Catalyst characterization (TPD, TPR)
 Promotion of hydrogen uptake in cerium dioxide. The role of iridium 31

Catalyst preparation (coprecipitation)
 Stabilized tetragonal zirconium oxide as a support for catalysts. Evolution of the texture and structure on calcination in static air 79

Catalyst preparation (gallium-ZSM-5)
 Aromatization of ethane over gallium-promoted H-ZSM-5 catalysts 15

Cerium dioxide
 Promotion of hydrogen uptake in cerium dioxide. The role of iridium 31

Chemicals
 New catalytic technology commercialized in the USA during the 1980's – a Review 141

Chromium
 Hydrogenation activity and selectivity of cobalt borides 185

Cobalt boride
 Hydrogenation activity and selectivity of cobalt borides 185

Coke
 Characterization of nitrogen on aged hydro-processing catalysts by temperature-programmed oxidation 265

Coke formation
 Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites 257

Coking
 Characterization of nitrogen on aged hydro-processing catalysts by temperature-programmed oxidation 265

Commercial processes
 New catalytic technology commercialized in the USA during the 1980's – a Review 141

Copper-zinc-aluminium	
Raney type copper-zinc-aluminium catalyst for water-gas shift reaction	199
Cracking	
Catalytic cracking of organic amides. I. Production of N-vinylformamide	45
Cracking	
Catalytic cracking of organic amides. II. Use of substituted amides, mechanism, and a predictive index for reactivity	65
Crystallinity	
Effect of water vapor on the selectivity in the reduction of nitric oxide with ammonia over vanadia supported on silica-titania	109
Cyclization	
Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites	257
Deactivation	
Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites	257
Dehydrogenation	
Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites	257
Dispersion	
Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites	257
Electron microscopy	
Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites	257
Electron transfer	
Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites	257
Environment	
New catalytic technology commercialized in the USA during the 1980's — a Review	141
Ethane	
Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites	257
Ethane aromatization	
Aromatization of ethane over gallium-promoted H-ZSM-5 catalysts	15
Ethane dehydrogenation	
Aromatization of ethane over gallium-promoted H-ZSM-5 catalysts	15
Formaldehyde	
Reaction of nitric oxide with metal-loaded carbon in the presence of oxygen	L1
Formaldehyde formation	
Factors controlling the reactivity of the silica surface in methane partial oxidation	L7
Gallium	
Aromatization of ethane over gallium-promoted H-ZSM-5 catalysts	15
Galvanic couple	
Raney type copper-zinc-aluminium catalyst for water-gas shift reaction	199
Granulated alumina	
Production of spherical granules of alumina with controlled porous structure	175
n-Heptane conversion	
Surface features and catalytic performances of platinum/alumina and platinum-rhenium/alumina catalysts for n-heptane conversion prepared by metal carbonyl complexes	1
n-Hexane	
Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites	257
Hydrogen	
Promotion of hydrogen uptake in cerium dioxide. The role of iridium	31
Hydrogenation (carbonyl, olefinic, selective)	
Hydrogenation activity and selectivity of cobalt borides	185
Hydroisomerization	
Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites	257
Hydroprocessing catalysts	
Characterization of nitrogen on aged hydroprocessing catalysts by temperature-programmed oxidation	265
In-situ X-ray diffraction	
Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies	227
Intercalated particles	
Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies	227
Iridium	
Promotion of hydrogen uptake in cerium dioxide. The role of iridium	31
Iron carbide	
Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies	227
Iron oxide	
Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies	227

Leaching	
Raney type copper-zinc-aluminium catalyst for water-gas shift reaction	199
Magnesium oxide	
Catalytic cracking of organic amides. I. Production of N-vinylformamide	45
Magnesium oxide	
Methylbutynol: a new and simple diagnostic tool for acidic and basic sites of solids	213
Magnetite	
Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies	227
Manganese-iron	
Temperature-programmed desorption study on manganese-iron catalysts	97
Mechanical strength	
Production of spherical granules of alumina with controlled porous structure	175
Metal cluster catalysts	
Surface features and catalytic performances of platinum/alumina and platinum-rhenium/alumina catalysts for n-heptane conversion prepared by metal carbonyl complexes	1
Methane	
Reaction of nitric oxide with metal-loaded carbon in the presence of oxygen	L1
Methane partial oxidation	
Factors controlling the reactivity of the silica surface in methane partial oxidation	L7
Moessbauer spectroscopy	
Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies	227
Molybdenum	
Hydrogenation activity and selectivity of cobalt borides	185
Niobia	
Characterization of palladium-copper bimetallic catalysts supported on silica and niobia	125
Nitric oxide	
Vanadia/titania catalysts in selective catalytic reduction of nitric oxide with ammonia	241
Nitric oxide reduction	
Effect of water vapor on the selectivity in the reduction of nitric oxide with ammonia over vanadia supported on silica-titania	109
Nitrogen	
Characterization of nitrogen on aged hydro-processing catalysts by temperature-programmed oxidation	265
Nitrous oxide	
Effect of water vapor on the selectivity in the reduction of nitric oxide with ammonia over vanadia supported on silica-titania	109
Oligomerization	
Aromatization of ethane over gallium-promoted H-ZSM-5 catalysts	15
Palladium-copper	
Characterization of palladium-copper bimetallic catalysts supported on silica and niobia	125
Partial oxidation	
Reaction of nitric oxide with metal-loaded carbon in the presence of oxygen	L1
Petrochemical technology	
New catalytic technology commercialized in the USA during the 1980's — a Review	141
Petroleum refining	
New catalytic technology commercialized in the USA during the 1980's — a Review	141
Platinum	
Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites	257
Platinum-rhenium/alumina	
Surface features and catalytic performances of platinum/alumina and platinum-rhenium/alumina catalysts for n-heptane conversion prepared by metal carbonyl complexes	1
Platinum/alumina	
Surface features and catalytic performances of platinum/alumina and platinum-rhenium/alumina catalysts for n-heptane conversion prepared by metal carbonyl complexes	1
Polymers	
New catalytic technology commercialized in the USA during the 1980's — a Review	141
Porous structure	
Production of spherical granules of alumina with controlled porous structure	175
Pseudoboehmite	
Production of spherical granules of alumina with controlled porous structure	175

Raman spectroscopy

- Vanadia/titania catalysts in selective catalytic reduction of nitric oxide with ammonia 241

Raney copper

- Raney type copper-zinc-aluminium catalyst for water-gas shift reaction 199

Rutile

- Vanadia/titania catalysts in selective catalytic reduction of nitric oxide with ammonia 241

Saturated hydrocarbons

- Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies 227

Selective catalytic reduction

- Vanadia/titania catalysts in selective catalytic reduction of nitric oxide with ammonia 241

Selectivity (alkenes)

- Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies 227

Silica

- Methylbutynol: a new and simple diagnostic tool for acidic and basic sites of solids 213

Silica

- Factors controlling the reactivity of the silica surface in methane partial oxidation L7

Silica

- Reaction of nitric oxide with metal-loaded carbon in the presence of oxygen L1

Silica-alumina

- Methylbutynol: a new and simple diagnostic tool for acidic and basic sites of solids 213

Sintering

- Effect of water vapor on the selectivity in the reduction of nitric oxide with ammonia over vanadia supported on silica-titania 109

Spherical particles

- Production of spherical granules of alumina with controlled porous structure 175

Spillover

- Promotion of hydrogen uptake in cerium dioxide. The role of iridium 31

Spinel

- Temperature-programmed desorption study on manganese-iron catalysts 97

Spinel-carbide interface

- Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies 227

Stabilized tetragonal zirconia

- Stabilized tetragonal zirconium oxide as a support for catalysts. Evolution of the texture and structure on calcination in static air 79

Strong metal-support interaction

- Characterization of palladium-copper bimetallic catalysts supported on silica and niobia 125

Structural and textural stabilizers

- Stabilized tetragonal zirconium oxide as a support for catalysts. Evolution of the texture and structure on calcination in static air 79

Syngas conversion

- Temperature-programmed desorption study on manganese-iron catalysts 97

Temperature-programmed decomposition

- Surface features and catalytic performances of platinum/alumina and platinum-rhenium/alumina catalysts for n-heptane conversion prepared by metal carbonyl complexes 1

Temperature-programmed desorption

- Temperature-programmed desorption study on manganese-iron catalysts 97

Temperature-programmed oxidation

- Surface features and catalytic performances of platinum/alumina and platinum-rhenium/alumina catalysts for n-heptane conversion prepared by metal carbonyl complexes 1

Temperature-programmed oxidation

- Characterization of nitrogen on aged hydroprocessing catalysts by temperature-programmed oxidation 265

Temperature-programmed reduction

- Characterization of palladium-copper bimetallic catalysts supported on silica and niobia 125

Textural characteristics

- Production of spherical granules of alumina with controlled porous structure 175

Thermal stability

- Stabilized tetragonal zirconium oxide as a support for catalysts. Evolution of the texture and structure on calcination in static air 79

Titania

- Vanadia/titania catalysts in selective catalytic reduction of nitric oxide with ammonia 241

Titania-silica

Effect of water vapor on the selectivity in the reduction of nitric oxide with ammonia over vanadia supported on silica-titania 109

Transmission electron microscopy

Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies 227

United States

New catalytic technology commercialized in the USA during the 1980's — a Review 141

Vacancies

Carbon monoxide hydrogenation over iron oxide, subjected to shear deformation under high pressure: role of vacancies 227

Vanadia

Effect of water vapor on the selectivity in the reduction of nitric oxide with ammonia over vanadia supported on silica-titania 109

Vanadia

Vanadia/titania catalysts in selective catalytic reduction of nitric oxide with ammonia 241

Vinyl amides

Catalytic cracking of organic amides. I. Production of N-vinylformamide 45

Vinyl amides

Catalytic cracking of organic amides. II. Use of substituted amides, mechanism, and a predictive index for reactivity 65

N-Vinylformamide

Catalytic cracking of organic amides. I. Production of N-vinylformamide 45

N-Vinylformamide

Catalytic cracking of organic amides. II. Use of substituted amides, mechanism, and a predictive index for reactivity 65

Water

Effect of water vapor on the selectivity in the reduction of nitric oxide with ammonia over vanadia supported on silica-titania 109

Water-gas shift reaction

Raney type copper-zinc-aluminium catalyst for water-gas shift reaction 199

Yttrium

Stabilized tetragonal zirconium oxide as a support for catalysts. Evolution of the texture and structure on calcination in static air 79

Zeolites

Aromatization of ethane over gallium-promoted H-ZSM-5 catalysts 15

Zeolites

Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites 257

Zirconia

Stabilized tetragonal zirconium oxide as a support for catalysts. Evolution of the texture and structure on calcination in static air 79

Zirconium oxide

Methylbutynol: a new and simple diagnostic tool for acidic and basic sites of solids 213

ZSM-5

Aromatization of ethane over gallium-promoted H-ZSM-5 catalysts 15

ZSM-5

Influence of platinum dispersion on the ethane aromatization on Pt/H-ZSM-5 zeolites 257

